MAILED

MAR 22 1994

PAT.&T.M. OFFICE
BOARD OF PATENT APPEALS
AND INTERFERENCES

Art Unit 2603 Paper No. 25

Appeal No. 93-1399 dem

ON BRIEF

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte Gregory J. Dettro
Gerald P. Labedz
and
Frederick G. Atkinson

Application for Patent filed November 30, 1988, Serial No. 07/277,724. AGC Isolation Of Information In TDMA Systems.

Raymond J. Warren et al. for Appellants.

Supervisory Patent Examiner - Douglas W. Olms
Examiner - Min Jung

Before Hairston, Krass and Cardillo, Administrative Patent Judges.

Cardillo, Administrative Patent Judge.

This is a decision by Examiners-in-Chief[1] designated in accordance with 35 U.S.C. § 7 on the appeal taken under 35 U.S.C. § 134 from the examiner's final rejection of claims 1 to 23. Based upon reconsideration in the answer, the examiner has indicated that claims 7, 9, 12, 13, 14, 17 and 18 are now considered as being directed to allowable subject matter while

[1]In accordance with the notice in 1156 OG 32, Nov. 9, 1993, the Examiners-in-Chief have been directed to use the title Administrative Patent Judge.

claims 20 and 23 are considered allowable (answer, page 7). This leaves claims 1 to 6, 8, 10, 11, 15, 16, 19, 21 and 22 for our consideration in this appeal.

The invention relates to an apparatus and method for isolating and processing certain information-of-interest in a communications system. We reproduce method claim 1 and apparatus claim 21 as being broadly illustrative as follows:

1. In a communications system having transmissions containing certain information-of-interest at predetermined intervals in the transmission, a method for isolating and processing that information-of-interest, comprising:

sensing a transmission

and isolating for processing as the information-of-interest, the information received about instant(s) temporally and predeterminally removed from the sensed transmission,

whereby the information-of-interest is isolated principally on the basis of elapsed time.

21. In a communications system having transmissions containing certain information-of-interest at predetermined intervals in the transmission, an apparatus for isolating and processing that information-of-interest, comprising:

means for sensing a transmission, operatively coupled with

means for isolating for processing as the information-of-interest, the information received about instant(s) temporally and predeterminally removed from the sensed transmission,

whereby the information-of-interest is isolated principally on the basis of elapsed time.

The reference of record relied upon by the examiner is:

Meuriche et al. (Meuriche) 4,757,502 Jul. 12, 1988

Claims 1, 3, 6, 8, 10, 11, 15 and 21 stand rejected as being anticipated by Meuriche under 35 U.S.C. § 102(e).

Claims 2, 4, 5, 16, 19 and 22 stand rejected under 35 U.S.C. § 103. As evidence of obviousness, the examiner offers Meuriche.

Rather than repeating the arguments of the appellants or the examiner, we make reference to the briefs and the answer for the details thereof.

OPINION

After a careful review of the record before us, we find that we must reverse the outstanding rejections under both 35 U.S.C. § 102 and § 103. However, we further find that we must institute a new rejection pursuant to 37 CFR § 1.196(b) as to the claims at bar under the second paragraph of 35 U.S.C. § 112. Additionally, we remand the application to the examiner pursuant to 37 CFR 1.196(d) to reconsider the allowance of claims 20 and 23 as well as the indication of allowable subject matter that has been made as to claims 7, 9, 12, 13, 14, 17 and 18.

Before we treat the rejections under § 102 or § 103, we first consider the question of the definiteness of the language used in the claims under appeal. See In re Moore, 439 F.2d 1232, 169 USPQ 236 (CCPA 1971). This being the case, we turn first to the entry of a new ground of rejection, set forth below.

NEW GROUND OF REJECTION
(37 CFR § 1.196(b))

Claims 1 to 6, 8, 10, 11, 15, 16, 19, 21 and 22 are rejected under the second paragraph of 35 U.S.C. § 112 as being indefinite.

Independent claims 1, 19, 21 and 22 all begin by calling for a "communications system having transmissions containing certain information-of-interest at predetermined intervals in the transmission." As disclosed, there are access request transmissions of "Access Messages 115" from plural "Subscriber units" (specification, page 4, lines 27-29). If these messages are to be considered to be the claimed "information- of-interest," the meaning of "predetermined intervals in the transmission" (emphasis ours) is not clear. Perhaps appellants intend to reference the disclosed occurrence of "Access Messages" within a time slot 0 (Figure 1, part of Frame 109) or perhaps that all "Access Messages" occupy the same amount of time, or perhaps something totally different, since each of these suppositions is not entirely consistent with the disclosure. First, we note that time slot 0, as illustrated in Figure 1, is not an interval in a transmission as claimed. This is because there is no "transmission" before illustrated key up 141 or after key down 143. Second, the actual transmission of an "Access Message" takes up only one interval during the total time

of transmission from noted key up 141 to key down 143. Thus, what appellants may intend to encompass as to "predetermined intervals in the transmission" is, at best, guess work.

This is not the only guess work associated with the terms used in the appealed claims, however. Each of the independent claims noted above also requires that there is an "isolating for processing" of "the information received about instant(s) temporally and predeterminally removed from the sensed transmission" or "from the sensed start of transmission," none of which makes any sense. First, it is not clear which of the common meanings of "about" is intended. Perhaps appellants intend to say "received approximately at an instant temporally displaced from the sensed start of transmission," which appears to be what has been suggested in the specification. Yet, if this is the case, the recital of "instant(s)" is not clear. Since isolation for processing can only have <u>one</u> actual beginning point, the apparent possibility of a plurality of "instant(s) is confusing. Perhaps appellants are suggesting that actual processing of information begins at one instant and continues for some predetermined time period until it ends at another instant such that these "instant(s)" surround or are "about" the information. Then again, perhaps not. Moreover, since the only disclosed separation is one involving time ("temporally"), the recitation of "temporally and predeterminally" is further

confusing. Perhaps appellants intend to say that some instant or instants occur some predetermined time before or after the sensing of a transmission (or start of a transmission) and that this instant or these instants will be used to determine what information will be processed. Then again, perhaps not. The only thing clear is that we must speculate as to what is intended.

This last point of speculation raises a further question as to what "isolated principally on the basis of elapsed time" is intended to mean in claims 1 and 21. Page 9 (at lines 27-42) of the specification appears to indicate that isolation for processing of the access request information ("information-of-interest") is initiated because a tag bit transition exists which marks the approximate beginning of what appears to be a likely starting point of a transmission of such a request. However, actual isolating for processing of the access request of "Access Message 115" does not occur until there is a confirmation based upon a correlation of the "Synchronizing Bits" of message portion 147, see page 9, lines 39-42 of the specification. Perhaps appellants are attempting to claim this correlation of synchronizing bits as the claimed processing. If so, we can only note that the actual disclosed "information-of-interest" is not simply these synchronizing bits, it is the access request data following them.

These are by no means the only inconsistencies we find between what has been disclosed in the specification and what is claimed. In this regard, we note the claim 2 requirement for "sensing when the received signal power of the transmission exceeds a predetermined threshold." However, as disclosed, it is the value of an AGC voltage (not received signal power itself) exceeding a threshold value which is sensed. Similarly, the disclosure is that no AGC control voltage is applied to the IF amplifier 205 to reduce the gain thereof until after the possible key up over threshold is detected by 261. Thus, claims 3, 19 and 22 make no sense in referencing "Automatically Gain Controlling" ("AGCing" in claims 19 and 22) "the transmission and alternating the AGC'd transmission from a maximum level to a desired level before the information-of-interest is expected to arrive." Likewise, nothing is disclosed that corresponds to the claim 6 "clamping the AGC voltage at the level prevailing at the predetermined instant," much less can we determine which one of many possible "instant(s)" is being referenced. If the intent was to claim the "holding" associated with disclosed capacitor 257, the use of the term "clamping" fails to reasonably convey such capacitive "holding." With respect to claim 8, we can find nothing disclosed that corresponds to the "AGC power detector" much less how such detected AGC power is used "for other system determinations." Likewise, the claim 10 "wherein information

about the AGC level is retained for reception of subsequent transmissions" make no sense unless we consider "transmissions" as used in this claim to be different from the use of this term in ultimate base claim 1. Thus, claim 10 "transmissions" perhaps refer to subsequent traffic slot transmissions that occur after access message receipt while it is the "Access Message" itself which appears to us to be the information-of-interest in the claim 1 recited "transmissions."

Clearly, the claims cannot be read in a vacuum to determine the meanings of the terms therein, the specification as well as the usage in the art must also be considered. See In re Moore, supra. Thus, any discrepancies and inexplicable inconsistencies between the apparent meaning of what is claimed and what is disclosed mandates a rejection under the second paragraph of 35 U.S.C. § 112. See In re Cohn, 438 F.2d 989, 169 USPQ 95 (CCPA 1971).

Moreover, the claim 6 reference to "the predetermined instant" as well as the reference to "about that instant" of claims 15 and 22 lack clear antecedent basis as to which previously recited instants are intended. Again, prohibited speculation to guess the metes and bounds of the claimed subject matter is required.

In light of the foregoing, we must reverse the 35 U.S.C. § 102(e) rejection of claims 1, 3, 6, 8, 10, 11, 15 and 21

as well as the § 103 rejection of claims 2, 4, 5, 16, 19 and 22. Before any claimed invention can be considered to be directed to obvious subject matter, the metes and bounds thereof must be reasonably clear without resort to speculation. Such is not the case here as fully treated, supra. Note In re Steele, 305 F.2d 859, 134 USPQ 292 (CCPA 1962) and see In re Wilson, 424 F.2d 1382, 165 USPQ 494 (CCPA 1970).[2]

Turning to objected to claims 7, 9, 12, 13, 14, 17 and 18 and allowed claims 20 and 23, we note that they contain limitations like those found to be indefinite under the second paragraph of 35 U.S.C. § 112 as fully treated above as to claims 3, 6, 8, 19 and 22. therefore, these claims are, in our view, at least unpatentable over this paragraph of § 112.

In addition, we note that claims 7, 20 and 23 are also inaccurate and misdescriptive because the disclosed diode detector is not disclosed to do any "clamping" as claimed here. Moreover, the claim 9 reference to "AGC" is incomplete (voltage level or power level) and the part played is not set forth as to either "AGC and received power levels." The claim 13 alternate tagging is not clear nor is its reference to "digitizing the transmission" (emphasis ours, see above). Claim 14 is similarly

[2]By our reversals of the rejections under 35 U.S.C. § 102 and § 103, we do not mean that the art applied is not or may not be relevant to appropriately definite claims within the meaning of the second paragraph of 35 U.S.C. § 112.

deficient and raises questions as to what the scope of coverage of "the high bit (overflow) from the A/D" might be as well as which one of the plural disclosed A/D converter is being claimed in claims 13 and 14 as well as claim 17. Claim 18 appears to present inconsistent processing steps as mere possibilities (if desired) instead of positively recited claim steps. Claims 20 and 23 are also confusing in referencing "oversampling in an analog-to-digital converter (A/D)" with seemingly inconsistent "processing" statements.

SUMMARY

We have reversed the § 102(e) rejection of claims 1, 3, 6, 8, 10, 11, 15 and 21 as well as the § 103 rejection of claims 2, 4, 5, 16, 19 and 22. However, we have entered a new ground of rejection as to these claims (37 CFR § 1.196(b)) under the second paragraph of 35 U.S.C. § 112.

Additionally, we remand the application to the examiner pursuant to 37 CFR § 1.196(d) to reconsider the indicated allowable subject matter of claims 7, 9, 12, 13, 14, 17 and 18 as well as the allowance of claims 20 and 23.

Effective August 20, 1989, 37 CFR § 1.196(b) has been amended to provide that a new ground of rejection pursuant to the rule is not considered final for the purpose of judicial review under 35 U.S.C. § 141 or § 145. Moreover, 37 CFR § 1.196(e) was

added which indicates that any decision including a remand (as in the instant decision) cannot be considered a final one.

Any request for reconsideration or modification of this decision by the Board of Patent Appeals and Interferences based upon the same record must be filed within one month from the date of the decision (37 CFR § 1.197).

A period of two months is set in which the appellants may submit to the Primary Examiner an appropriate amendment, or a showing of facts or reasons, or both, in order to avoid the grounds set forth in the statement of the Board of Patent Appeals and Interferences under the provisions of 37 CFR § 1.196(d) and/or prosecute further before the Primary Examiner by way of amendment or showing of facts, or both, not previously of record with respect to the new rejection under 37 CFR § 1.196(b) if the appellants so elects.

Upon conclusion of the proceedings before the Primary Examiner on remand, this case should be returned to the Board by the Primary Examiner so that the Board may either adopt its decision as final or render a new decision on all of the claims on appeal, as it may deem appropriate. Such return for this purpose is unnecessary if the application is abandoned expressly

or as the result of an unanswered Office action, allowed or again appealed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a). See the final rule notice, 54 F.R. 29548 (July 13, 1989), 1105 O.G. 5 (August 1, 1989).

REVERSED - 37 CFR § 1.196(b) and (d)

Kenneth W. Hairston )
Administrative Patent Judge)
)
)
)
Errol A. Krass ) BOARD OF PATENT
Administrative Patent Judge) APPEALS
) AND
) INTERFERENCES
)
Raymond F. Cardillo, Jr. )
Administrative Patent Judge)

Donald B. Southard
Motorola, Inc.
1303 East Algonquin Road
Schaumburg, IL 60196